

CS Widdifield

1. Most will be medium ~~height~~ height but there is a chance that it could get the tall gene or the short gene. The combination of tall and short would make a medium height plant.

2. Why were there no medium sized plants? ~~Why were~~ Is tall a dominant trait over small? What happened to the shortness?

↳ Self Pollinate

3. I think that after self pollinating there will be most tall plants and one short plant due to the recessive gene, coming out in F2 offspring.

4. Yes I expected there to be at least 1 small plant because the F1 is a mix, F2 can have two recessive genes causing shortness to arise again.

5. Because it is recessive one plant must be a mix of the tall x. short breed to create a recessive aa pattern, ultimately causing shortness.

787:277

Tall Short

~~787~~ 3:1

75% 25%

P1: Tall x Short = ?

F1: Tall → Tall x Tall

F2: 787 Tall → 3 Tall

277 Short → 1 Short

Conclusions

Short is a recessive gene. This is why the majority of the plants are tall. However once a mixed breed is combined with another breed the recessive gene comes back at a 3:1 ratio.